# Abnormal Thyroid Function Following COVID-19 Vaccination

Sir,

We would like to share ideas on new evidence of abnormal thyroid function following the COVID-19 vaccination. Lastra *et al*. noted that Graves' disease might occur after SARS-CoV-2 vaccination[1] and noted that adjuvants might induce disorder. Recently, there have been some reports on thyroid problems following vaccinations.[1,2] We agree that the adjuvant might cause alteration of the immune system and cause thyroid problems. Nevertheless, there might also be other possible pathomechanisms. Pathophysiologically, administration of the COVID-19 vaccine results in increased blood viscosity and might cause hyperviscosity.[2] If hyperviscosity occurs, it can result in an aberrantly increased thyroid hormone level.[3] It is interesting to have a further study on thyroid function among healthy and thyroid patients who receive the COVID-19 vaccination.

## Financial support and sponsorship

Nil.

## Conflicts of interest

There are no conflicts of interest.

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## References

1. Lastra OV, Navarro AO, Domiguez MPC, Medina G, Valadez TIS, Jara LJ. Two cases of Graves' disease following SARS-CoV-2 vaccination: An autoimmune/inflammatory syndrome induced by adjuvants. Thyroid 2021. doi: 10.1089/thy. 2021.0142.
2. Joob B, Wiwanitkit V. Expected viscosity after COVID-19 vaccination, hyperviscosity and previous COVID-19. Clin Appl Thromb Hemost 2021;27:10760296211020833.
3. Tamagna E, Hershman J, Premachandra BN. Circulating thyroid hormones in a patient with hyperviscosity syndrome. Clin Chim Acta 1979;93:263-8.

**Submitted:** 21-Jun-2021 **Revised:** 01-Jul-2021
**Accepted:** 08-Jul-2021 **Published:** 08-Sep-2021



**Access this article online**

Quick Response Code:

**Website:** www.ijem.in

**DOI:** 10.4103/ijem.ijem_286_21

**How to cite this article:** Mungmunpuntipantip R, Wiwanitkit V. Abnormal thyroid function following COVID-19 vaccination. Indian J Endocr Metab 2021;25:169.